# Improving Performance

Competition in American Public Education

NATIONAL ALLIANCE
OF BUSINESS

This report was written for the National Alliance of Business by Thomas Toch, a Guest Scholar at The Brookings Institution and a contributing editor at U.S. News and World Report. Research assistance was provided by John T. Yun, a doctoral candidate at the Harvard Graduate School of Education, and Matthew Walker.

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Reformers have taken many important steps in recent years to improve public education. They have focused on improving the quality of teaching, strengthening curriculum, developing accountability systems, and decentralizing authority. But as business leaders, we know that these reforms, by themselves, are not sufficient to spark the creative energy necessary to

redesign school systems and substantially improve student achievement. Competition and the incentives it provides are necessary to maximize efficiency, harness innovation, and ultimately, improve customer satisfaction.

The public education system is facing more pressure than ever before. Education leaders must meet higher performance expectations, not just for some, but for all students. And they are being held accountable for results in very public ways. Virtually every state is designing assessments to track progress, and consequences for achievements and failures.

There is growing awareness that certain types of competition can improve student achievement. NAB has spent the last year studying incentive systems in public education. This publication outlines fifteen different valuable models—some local, some state sponsored, and some national in scope. We recognize that certain types of competition can place some students at a disadvantage. This report, as a result, examines examples that benefit all students. We have been careful to examine the pros and the cons of different approaches, and we've suggested conditions that are necessary for these competition-based incentives to flourish.

In the history of public education, schools, educators, and students have enjoyed few rewards for success, and have faced few consequences for poor performance. We are now entering an era that will increasingly recognize success and punish failure. Implementing competitive pressures, such as those outlined in this report, is just one step—but an essential one—necessary to improve education for all students. We call on educators and policymakers at the national, state, and local levels to introduce into public schools the incentives discussed in this report.

I hope you find this publication informative and thought provoking.

Edward B. Rust, Jr.

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Chairman, National Alliance of Business

Chairman and CEO, State Farm Insurance Companies

The National Alliance of Business, a non-profit organization, advances business leadership at the national, state, and local levels to improve workforce quality through enhanced education and training. The key to success for American business is a quality workforce - a workforce for which all citizens are educated and trained to world-class standards, beginning in school and continuing throughout their careers.

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## Executive Summary

The public education system must improve and improve continuously. Reformers have taken many steps in recent years to raise student achievement. They have enacted higher standards, introduced new instructional strategies, and sought stronger teachers. But it is increasingly clear to business leaders that the public education system is simply not going to respond sufficiently to reformers without incentives to perform at higher levels. The private sector encourages hard work, innovation, and high standards through the risks and rewards of competition. But in public schools, educators and students have faced few consequences for their failures and even fewer rewards for their successes. The National Alliance of Business believes that introducing such consequences and rewards into public education is essential to raising student achievement and spurring schools to improve continuously.

We have spent the past year studying incentive systems in public education. We have found fifteen different valuable models-some local, some state sponsored, and some national in scope. They provide incentives for schools, individual educators, and students, because those groups are at the center of the teaching and learning process and thus have the greatest opportunity to influence student achievement.

Every one of the models has the potential to improve student achievement. But our research suggests that they work best in combination with one another and with other reforms. Our research also suggests several other conditions that are necessary for competition-based incentives to flourish in public schools:

High, clearly defined, and publicly supported academic standards;

- Widespread public disclosure of school performance; and
- Significant consequences for both good and bad work.

More broadly, to meet society's economic, social, and political expectations for the public school system, schools must have:

- High academic standards that are continually updated;
- Sufficient autonomy over staffing, budgets, and instruction;
- Leaders with a "no excuses" mindset who are held strictly accountable for the performance of each and every student; and
- Resources that are sufficient to give all students the opportunity to achieve high standards.

## Challenge

The National Alliance of Business, on behalf of the business community, calls on educators and policymakers at the national, state, and local levels to introduce into public schools the incentives discussed in this report. Specifically, we challenge them to:

- Enact a wide range of measures that give schools, educators, and students the strongest possible incentives to perform at high levels;
- Endorse the right of every child to attend a school with high standards and strong accountability for the performance of every student;
- Give parents the right to select such schools for their children; and
- Provide the resources necessary to ensure that all students have an equal opportunity to achieve high academic standards.

### I. Introduction

Business leaders have strongly supported steps in recent years to strengthen the public schools. They have endorsed high academic standards, demanding curricula, highly trained teachers, and a strong sense of community in schools. They have done so because they believe that the nation's 47 million public school students should be part of a rigorous education system with accountability for the achievement of every child.

It is increasingly clear to business leaders, however, that the public education system will not respond to such calls for reform in the absence of pressure to do so. The private sector encourages hard work and high standards through the risks and rewards of competition. But in public schools, educators and students have faced few consequences for their failures and even fewer rewards for their successes. The National Alliance of Business believes that introducing such consequences and rewards into public education is essential to raising student achievement and spurring schools to continually improve.

Fortunately, many such incentive systems already exist in public education. In this report we discuss fifteen different types of incentives-some local, some state sponsored, and some national in scope-that can help raise student achievement. The purpose of the report is to help educators and policymakers introduce such incentives in thoughtful ways.

We discuss incentives for schools, individual educators, and students, because those groups are at the center of the teaching and learning process and thus have the greatest opportunity to influence student achievement. Each of the models we've studied has the potential to help raise student achievement. But our research suggests that they work best in

combination with one another and with other reforms. Our research also suggests that there are several conditions that are necessary for competition-based incentives to flourish in public schools:

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## **Background**

The public schools are doing more for more students than ever. Graduation rates are at record levels, the percentage of students taking advanced courses has risen steadily, and the wide gap in performance between white and African American students, while still substantial, has narrowed.

But the schools aren't doing nearly enough. The National Assessment of Educational Progress reports that a third of the nation's 17-year-olds lack basic proficiency in reading. The Third International Math and Science Study reveals that the longer American students study those subjects in school the further they fall behind their peers in other industrialized nations. And in contrast to countries such as France and Germany, where 50 percent of students take advanced exams, only 7 percent of American students take Advanced Placement tests.

In the past, students didn't pay a particularly heavy price for receiving a superficial education. Basic literacy was enough to earn middle-class wages in an industrial economy that required most workers to use their hands rather than their heads. And because it wasn't necessary for schools to be demanding of their students, many weren't. But in today's fast-changing, knowledge-based economy, a rigorous elementary and secondary education is increasingly a prerequisite for post-secondary education, well-paying jobs, and lifetime learning.

MAB believes that every child has the right to attend a school with high standards and strong accountability, and that parents have the right to select such schools for their children. Choice within a public system guided by such standards and accountability is essential for continuous improvement.

NAB believes strongly that public education should provide students equal educational opportunities. Yet under certain types of competition, some students are, through no fault of their own, put at an educational disadvantage. This report, as a result, stresses the importance of crafting competitiveness plans that ensure all students have the opportunity to meet high standards.

### Challenge

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- Enact a wide range of measures that give schools, educators, and students the strongest possible incentives to perform at high levels;
- Endorse the right of every child to attend a school with high standards and strong accountability for the performance of every student;
- Give parents the right to select such schools for their children; and
- Provide the resources necessary to ensure that all students have an equal opportunity to achieve high academic standards.

# II. School Status and Rewards

The simplest way to introduce competition into public education is to have schools compete for public recognition. Educators, like their counterparts in other walks of life, appreciate being recognized in a public way for doing good work and resist the prospect of being singled out for poor performance.

## **School Report Cards**

One recognition strategy involves publishing report cards of school performance. Schools pay attention when they are publicly compared to other schools. The more extensive the media coverage, it seems, the stronger the effect. "It gets you on the ball," says Peggy Swenson, an administrator with the Maryville Public Schools in Tennessee, one of 36 states that publish report cards on their public schools, and where test scores have risen in recent years. Of course, parents also benefit from more complete information about the quality of their children's schools.

Some school report cards are better than others, however. The most effective of them share several key characteristics. The first is a standard, statewide system of evaluating schools. It's obviously impossible to compare schools' performance accurately if schools are judged by different criteria, yet some states let local school systems set their own evaluation standards.

Report card "grades" are best based on multiple measures of school success. Many state report cards focus almost exclusively on standardized test scores. But test scores, though important, hardly tell a school's whole story. Other factors, such as student and teacher attendance rates, graduation rates, teacher qualifications, and parental and student satisfaction are also

important indicators of a school's performance. Tennessee's "21st Century School Report Cards" include fiscal, demographic, and student discipline data. The fiscal information reveals a school's spending priorities and its relative efficiency; the discipline data - including numbers of suspensions and expulsions-reflect a school's social climate; and the demographic data allow policymakers and the public to compare a school's performance to that of others with like student populations and educational challenges. In every instance, report card standards should be aligned with state education objectives. The idea is to encourage schools to focus on educational priorities.

Of particular value are tests that measure and thus promote students' capacity to think—that cultivate their ability to do such things as interpret and apply information and express themselves clearly and persuasively. Teachers teach to tests, particularly when the tests have important consequences, and policymakers hoping to encourage higher levels of learning run the risk of producing exactly the opposite results in classrooms when they use tests that measure only low-level rote skills.

Test scores should be used carefully, so as to not ■ misrepresent a school's performance. Research shows that students' family backgrounds strongly influence achievement levels and that well-to-do students with college-educated parents tend to do well academically no matter what school they attend. Report cards that present test scores without accounting for the influence of family background don't accurately measure how much schools contribute to their students' achievement. Tennessee addresses the family background issue by measuring the changes in the test scores of schools and school systems from year to year over three years, rather than judging them on the basis of a single year's performance. Measuring the performance of schools in this way, however,

should not be taken as a call for lower standards for disadvantaged students. To the contrary, it identifies schools that educate such students well. Texas attempts to focus attention on improving the low achievement levels of some groups, particularly Hispanics and African Americans, by requiring schools to report student achievement by racial and ethnic groups. The state requires each group to meet the same standards, and releases results in a very public way - with a major press conference.

Report cards need to be easy to decipher and widely distributed. They aren't very valuable if they aren't broadly circulated or if they're too technical to grasp. Posting reports on the Internet isn't sufficient. In states that take additional steps, such as mailing school report cards to parents and publicizing results in state and local newspapers, the influence of the report cards is stronger.

#### Rewards and Sanctions

The best way to enhance the influence of report L cards, however, is to link schools' "grades" to rewards and sanctions for school staffs. Testing and the publication of results "are necessary but not sufficient," say researchers such as Paul Hill and Robin Lake, authors of the forthcoming study, State Standards and School Accountability. To fully focus their energies, schools must have a clear sense of what's expected of them. And educators are likely to be more motivated when they know they'll be rewarded when they meet expectations and sanctioned when they don't. "You've got to set explicit targets for the schools and it's got to matter whether they hit the targets," says Allan Odden of the Wisconsin Center for Education Research, who has studied state incentive systems.

**School-wide Rewards.** In recent years, 14 states have begun publishing report cards that link school performance to school-wide financial incentives. When schools hit performance targets, they receive financial bonuses.

States such as Indiana, Maryland, and New Mexico require that schools use their incentive monies for school-improvement efforts like hiring additional teachers or buying instructional materials. North Carolina, by contrast, has dictated that bonus monies be divided among the instructional staff in high-performing schools. In both instances, teachers have an incentive to work together to achieve school-wide performance targets. These approaches are an improvement over old-style "merit-pay" plans, which encouraged teachers to compete against one another for rewards—often to the detriment of staff unity, a key ingredient of successful schools.

In North Carolina, teachers, principals, and aides are all eligible for bonuses of up to \$1,500 a year. The state's two-tiered incentive system rewards schools where the percentage of students passing the state's math and reading achievement tests improves annually to levels expected by the state. The system further recognizes "exemplary" schools that surpass the state's expectations.

North Carolina's results have been impressive. Together with initiatives to raise teacher quality and focus special attention on low-performing schools, the school-wide incentives have helped schools achieve significant gains in reading in recent years on the rigorous National Assessment of Educational Progress. In addition, the percentage of "exemplary" schools has more than doubled to 66 percent since the reward system was introduced in 1996-97. Odden's research suggests that North Carolina's strategy of directing reward money to individual educators is preferable to giving funds to principals for use in school-wide

projects. With greater personal stakes in the reward system, the state's teachers pay close attention to what's expected in their classrooms in return for the rewards.

Another strength of the North Carolina incentive system is that it rewards schools on the basis of improvements in test scores. The alternative is to reward only schools with the top test scores. But that would exclude schools with large populations of disadvantaged students, who typically underperform their more affluent peers. By measuring the extent to which schools raise test scores from year to year, North Carolina gives even those schools with very low scoring students an incentive to work hard. At the same time, North Carolina officials encourage schools with very high scores to also work hard by basing rewards for such schools on smaller score gains.

Schools with 40 percent of their students achieving state standards might, for example, be required to achieve a 50 percent pass rate in order win rewards, while schools with a 90 percent pass rate might be required to achieve a 92 percent rate.

North Carolina's experience also suggests the power of reward systems to influence instruction: the state's financial rewards are pegged to reading and math scores, and students' scores in those subjects have risen much more rapidly than have those in science and social studies.

Again, teaching to tests is not necessarily a bad thing, if the tests measure students' grasp of the curriculum and academic skills that states want students to master. Such tests encourage teachers and students to focus on states' educational priorities. But where instructional priorities and tests are not aligned, financial incentive systems only make matters worse. They encourage teachers to spend more and more of the school day on the wrong curriculum.

Reward systems, however, are expensive. North Carolina spent \$117 million on incentives last school year. But because the rewards were spread so widely-only 17 percent of the state's 2,000 schools didn't qualify for them-the average award in schools that met (rather than exceeded) state expectations was only \$750, a tiny fraction of the state's \$36,141 average teacher salary. North Carolina would create more powerful incentives by giving larger awards to a smaller percentage of schools, says Karen Banks, assistant superintendent of evaluation and research in Wake County, the state's largest school system.

**School Sanctions.** Several states and school systems have put pressure on their lowest performing schools with sanctions for failing report card grades.

Chicago has a four-step sanction system that begins with schools being placed on "probation" if under 15 percent of their students are achieving at national averages on the Iowa Test of Basic Skills. The ultimate sanction is "reconstitution" of schools that persistently under-achieve, whereby city education officials step in and replace a school's principal, staff, local school council, or all three.

Chicago public educators take the threat of sanctions seriously. "It lit a fire under all of us," says Sharon Bender, the principal of Schurz High School, of being placed on probation by city school officials in 1996.

But if school sanction strategies are to be effective as engines of school improvement, they've got to share several of the characteristics of the Chicago system.

The city's sanctions are well defined.

Educators know the level of performance that puts them on probation, and they know the consequences of reconstitution. Similarly, the threat of severe sanctions is real. The staff of

Schurz "knew that the board meant what it said" about people losing their jobs at the school, says Bender. (Ironically, the seven schools that Chicago officials have reconstituted have been slow to improve, says Alfred Hess, a professor of education at Northwestern University, largely because the city has been hard-pressed to recruit high quality teachers to work in the troubled institutions-a reality that argues for paying bonuses to teachers recruited to work in take-over schools.)

hicago officials have also recognized that ✓ while the threat of sanctions gives educators an incentive to act, educators typically require considerable help in devising a plan of action and in executing it. (Most educators are well-meaning people; if they knew how to improve their schools they would do so voluntarily). Under the city's "probation support system," the principal of a highly regarded nearby parochial school served as Schurz's "probation manager." Northeast Illinois University was designated as the school's "external support partner." Together, they worked with Bender and her teachers to develop strategies for raising students' reading scores, including the introduction of a new daily schedule that doubled the length of English classes. The strategies helped; Schurz's probation was lifted in August, after the school met the city's modest reading standardstwenty percent of students achieving at national averages. In other parts of the country, where external support has not been provided to failing schools, the results have been less positive

Outsider intervention costs money. Indeed, a key to Schurz's recovery, says Bender, was a \$25,000 "recovery grant" from the school system that helped launch several important initiatives at the school. Chicago's willingness to invest in its struggling schools points to a serious, long-term challenge in public education: reducing the vast disparities in resources available to schools. Schools shouldn't be less accountable because they

have fewer resources, but they should be given the resources they need to improve. Money does matter. Some states and school systems have actually withheld funding from underachieving schools in an attempt to encourage them to improve, a step Odden and other finance experts call counterproductive.

It's also true that many under-performing schools that lack Schurz's bottom-of-the barrel status are not threatened by sanctions based on low standards. Rewards for ratcheting up achievement are likely to create stronger incentives for such schools. The strongest school-wide incentive systems are those that include both rewards and sanctions.

Schurz High School teaches other important lesson: if schools are going to be held directly accountable for their performance, they need to be given greater autonomy over budgets, staffing, and instructional strategies. Bender had sought to replace veteran teachers who were reluctant to take part in the school's redesign. But teacher tenure laws blocked her.

# III. Students as Consumers

Forcing schools to compete for students is another way to focus their attention on the quality of their programs. Traditionally, public schools have operated as quasi-monopolies. School systems have carved out an attendance zone for each school and required students within the zone to attend the school. Abolishing the zones and requiring schools to compete for students can, under the right circumstances, be a powerful catalyst for school improvement. Threatening educators with the loss of students and the revenue that students generate can help motivate them to improve.

# Public School Choice Plans

One strategy for creating competition for students within public education is to simply let students select the public schools they attend. There are several "choice" models in use in public education today, such as magnet schools and openenrollment plans. Some open-enrollment plans permit students to select schools within their school systems; others permit students to attend schools in other school systems. Today, about an eighth of the nation's public school students are enrolled outside of their neighborhood attendance zones.

But some types of school choice are more effective than others at promoting rigorous but fair competition. The record of school choice plans over the past decade suggests that several conditions are necessary for choice plans to promote school improvement. They include:

**Mandatory choice.** Much has been written about the results of the school choice plan in Community School District 4 in the East Harlem section of New York City, where academic achievement improved significantly after

attendance zones were abolished for junior high school students in the school system. But several key ingredients of the program's success haven't received much attention. One of the most important is that every junior high student MUST choose the school he or she attends. Schools must compete for every student.

In contrast, participation in most choice plans at both the state and school system levels is voluntary, students merely choose to choose. As a result, participation rates are far lower (only 2 percent to 3 percent of students take part in the voluntary inter-district choice plans that have been enacted in 16 states since 1987) and educators are put under much less competitive pressure. "The stakes are much higher when all students are put in motion," says Richard Elmore of the Harvard Graduate School of Education. Mandatory choice may sound like an oxymoron, but it's smart public policy.

Inter-district choice plans thus aren't the best models with which to promote competition between schools. It's politically and practically impossible to require students to select schools in other school systems.

But it is possible to introduce mandatory choice within school systems. Obviously the concept is likely to be less effective in sparsely populated rural areas, where students have to travel long distances to attend any school. But in urban and many suburban settings there are more than enough schools to generate real competition.

Very few school systems have introduced mandatory choice. One is District 4, where junior high students have been required to select their schools for nearly two decades. East Harlem is one of the nation's most impoverished communities. Yet in a forthcoming study that spans the history of the district's choice system, researcher Paul Teske and colleagues at the State University of

New York at Stony Brook conclude that "District 4 is the top, or nearly the top, district in New York City" in raising student achievement. And while other researchers have attributed District 4 performance to a variety of factors, including extra resources, the presence of affluent students from beyond its borders, and the small size of many choice schools, Teske's analysis of test scores and other indicators, which amounts to the most comprehensive evaluation ever done on the district, reveals that school choice has played a significant role in the district's success. Another measure of the vibrancy of school choice in the district: several schools that have failed to attract students over the years have been closed and reconstituted.

**Funding that follows students.** If there are no financial consequences for schools and school systems that lose students under choice plans they don't have much incentive beyond embarrassment to discourage students from departing. It's thus important that state and local student aid follow students when they opt for new schools under choice systems.

The Massachusetts eight-year-old inter-district lacksquare school choice law is particularly demanding in this regard. It requires "sending" school systems to pay—from their local tax revenues—a significant percentage of the education costs of their students who choose to attend other school systems. In a 1997 study of the Massachusetts choice plan by the Pioneer Institute, researchers David Armor and Brett Peiser found that school systems losing over 4 percent of their students under the plan "responded by improving their policies and programs to win back students or attract new ones," including expanding kindergarten offerings and modernizing buildings. Other researchers make a strong case that schools losing students should be at least partially subsidized for a short time for lost students and revenue, so as not to further compromise the education of students who stay.

#### Mandatory school system

involvement. Under inter-district choice plans, school systems need to serve as both sending and receiving jurisdictions. Texas permits students in schools with low test scores to transfer to other school systems. But the state allows school systems to turn away students hoping to transfer into their schools. And many do, particularly affluent school systems. Such veto power, Texas educators say, has contributed to very low transfer rates under the plan, and thus to a diminished sense of competition. Only 413 out of nearly 800,000 students in failing schools transferred to other school systems in 1997-98. (The Texas Education Agency says that more than 300,000 students are participating in other choice initiatives in the state, however).

But even if all school systems participated in inter-district choice plans, the districts would be able to take only as many students as there were empty seats, since school systems, as non-profit entities, have no incentive to build new buildings for overflow students they aren't required to educate. This is another reason why inter-district choice generates less competition between schools than mandatory choice within a school system, a policy known as intra-district choice.

#### **Ample information about School**

**Choices.** The Texas transfer program is also poorly subscribed because many families don't know about it, say educators in the state.

Understandably, low-performing districts haven't been eager to trumpet the program, and the state hasn't gotten the word out to families.

It's also necessary to educate parents about school choice plans and the range of schools available to them under the plans to make sure the plans don't exacerbate social inequities. Studies of school choice in Massachusetts, Minnesota, St. Louis, and in other countries such as Scotland and

New Zealand reveal that more-affluent and bettereducated families are most likely to participate in choice plans. Plentiful public information helps ensure that families from all backgrounds are aware of the best schools. That, in turn, helps ensure that weak schools are forced to improve to attract students.

In the absence of such information, many families, especially less affluent ones, select schools—if at all—on the basis of their proximity to parents' workplaces or for other non-academic reasons, leaving schools with little reason to raise student achievement.

A lack of information about school quality also results in some very good schools being slighted in the educational marketplace-schools that educate large numbers of disadvantaged students. Because parents lack objective information, they frequently assume that schools are inferior simply because they enroll disadvantaged students. Studies have documented this perception problem in public school choice plans both in the U.S. and abroad.

Cambridge, Massachusetts, where students have had to select from among the city's 13 elementary schools since the early 1980's-and where the percentage of students attending public rather than private schools has increased significantly since then—has a model program for informing parents of their educational options. It operates state-funded school information centers that provide families with information on the nature and performance of the city's schools. Two-thirds of Cambridge's families visit schools on district-led tours before selecting them.

**Providing transportation.** Getting to the schools they select isn't a problem for East Harlem's 14,400 students. Their school system is only 2.2. square miles. Getting to school via public transportation is easy. But in more expansive

suburban school systems and sparsely populated rural regions, transportation is key to making choice plans work and work fairly. Under Minnesota's inter-district choice plan, students selecting schools outside of their home school system must travel at their own cost to the border of their new school system. Low-income students get a token 15-cents-a-mile subsidy that most find insufficient. Lack of transportation is "the biggest drawback" of the Minnesota plan and is a big factor in a low (3 percent) participation rate that is skewed to more affluent students, says Tracy La Ferriere of the Minnesota State Department of Education. Nonetheless, a survey by researchers Janie Funkhouser and Kelly Colopy of school systems in the state's 12-year-old choice plan found that 58 percent of the districts that lost students expanded their course offerings, 42 percent made physical plant improvements; and 25 percent added counseling services.

#### **Differential Funding for Students.**

Students with learning disabilities and other challenges that make them more difficult to educate are at times discriminated against in choice plans. In District 4, for example, schools that have more applicants than seats can be selective. Not surprisingly, they tend to pick the brightest, best-behaved students, leaving many more-challenging students to less desirable schools.

The fairest solution to students is to require the use of lotteries to give students an equal chance to attend the school they've selected.

The Seattle school system has taken a third way in an attempt to be fair to both students and the schools that have to bear the cost of educating them. It gives schools an incentive to take more challenging students by increasing the funding schools receive for such students. Under the city's two-year-old voluntary intra-district choice plan,

the district provides base funding for every student and those with a variety of different needs get an additional sum, ranging from 9 percent for elementary students in poverty to 57 percent for mildly disabled students. "Without the weighting kids with needs would end up concentrated in the same schools," says John Vacchiery, the district's director of enrollment.

Addressing the supply issue. A vibrant choice system requires schools with different education philosophies, teaching strategies, and organizational structures. If students are selecting from schools that are essentially the same, they have much less of an incentive to do so.

### Public School Opt-out Plans

Ceveral states have successfully spurred **J**academic improvements in high schools by permitting their students to take college courses using the high schools' state education aid for tuition. In Minnesota, where 7 percent of eleventhand twelfth-graders take part in the state's 14-yearold Post-secondary Enrollment Options Program, the number of school systems offering Advanced Placement courses doubled within several years of the program's creation. In addition, a report on the Minnesota program by the research department of the Minnesota House of Representatives revealed that many high schools have established partnerships with local colleges since the inception of the post-secondary plan, permitting students to take college-level courses in high schools taught by qualified high school teachers. High schools have embraced the concept because they lose less funding than they would if their students departed to college campuses. La Ferriere says that 8.5 percent of the state's eleventh- and twelfth-graders are enrolled in advanced courses under such "side deals."

Of course, to create such incentives for high schools, the threat of students departing to colleges must be real. Not surprisingly, the legislative report in Minnesota found that the post-secondary program had little impact in areas that lacked colleges or community colleges. Nor are the interests of higher high school standards served if students take non-academic courses in college. In Minnesota, 43 percent of the courses students took under the post-secondary program were in English, composition, and social sciences such as political science, economics, and psychology. Another 15 percent were in math and science and 12 percent were in vocational subjects.

School systems, meanwhile, have sought to subvert such post-secondary programs in some states as a way of short-circuiting the competitive pressures that the programs have placed on them; they have sought to limit student participation in the programs and thus preserve their state education revenue. Ohio, for example, has a statewide system that allows any high school student to attend a public university and receive both high school and college credit for his or her work. Their tuition and books are paid for by the state. Marietta High School, in Marietta, Ohio, was losing 11 percent of its 1,299 students to nearby Washington State Community College. Rather than upgrade Marietta's curriculum, the local school board sought to dissuade high-achieving students from participating in the program by refusing them places on Marietta's honor role, denying them membership in national honor societies, and requiring more hours of instruction in the college courses. As a result, there are half as many students in the program this year as there were last year. In 1997, Minnesota lawmakers banned such retaliatory steps.

# Redefining "Public" Education

Traditionally, local school systems have both paid for and provided public education. In recent years, however, a wide range of organizations have launched taxpayer-funded schools, including YMCA's, churches, settlement houses, universities, labor unions, and for-profit companies. These new providers of public education represent a significant new source of educational choice for students and, as a result, a significant source of competition to traditional schools and school systems.

**Charter Schools.** The majority of the new public educators have gained entree to public education through charter schools, publicly funded institutions that in many cases operate beyond the reach of school system regulations and teacher union contracts. The first charter school opened in Minnesota in 1992 and today there are about 1,600 charters. Thirty-seven states and the District of Columbia have passed laws authorizing charter schools.

Many lawmakers voted for charter laws in the hopes that the new schools would spur reform in traditional public schools. That has not happened on a wide scale—yet. Many charter schools are small, attract students who are struggling in traditional public schools, and are located in areas with fast-growing populations, so many local educators aren't troubled by them. The 350,000 students who attend charters nationwide represent a tiny fraction of the 47-million student public school universe.

What's more, many charter schools have poor physical plants and undistinguished educational programs. In a comprehensive study of charter schools, charter advocates Bruno Manno, Chester Finn, and Louann Bierlein

observed that, "Many charter documents are filled with prose outlining a compelling educational philosophy. Far fewer demonstrate a clear sense of what comes next: coherent content and performance standards." Many states fail to supply sufficiently detailed information on charter schools' performance to permit parents to make informed choices. And some states reimburse school systems that lose students to charter schools 100 percent of their lost revenue, destroying the incentive they would have to win students back with improved programs.

But the rise of charter schools has prompted some school systems to respond in ways that are good for students. Confronted with declines in enrollment that had grown when several charter schools opened within its borders, the 19,060-student Lansing, Michigan school system established an all-day kindergarten program to attract children of working parents.

The school system also sought to turn over one of its schools to a for-profit company that planned to have a substantially longer school day and school year, a strong program in art and music, and computers in the homes of every student. The school system sought to locate the school on the border with an adjoining district, in an effort to lure new students into the district. The local teachers union, however, refused to let the for-profit company into the district—a measure of the widespread opposition within the public education system to greater competition.

But such opposition is by no means universal. In Toledo, Ohio, the local teachers union joined forces with school officials in response to the opening of a charter elementary school. They reconstituted a traditional public school with almost exactly the same educational program as that of the charter school, including a longer school day and school year, highly regarded

reading and math curricula, and laptop computers for teachers. They also staffed the school by application rather than by seniority, in order to attract the best possible teachers.

As the number of charter schools multiplies, the pressure on traditional public schools to respond with stronger educational offerings is likely to intensify.

**Managed schools.** Another strategy for creating competition between public schools through school choice is to hire an outside organization to manage traditional public schools. "Outsiders can introduce reforms to raise student achievement that tradition-bound school cultures wouldn't embrace on their own," says Larry Vaughn, the former superintendent of the Wichita, Kansas, school system, where a for-profit education company, Edison Schools, Inc., operates four schools with longer school years and school days, block scheduling, students and staff organized into houses, and several other innovations. "Once you tear down attendance zones and let families from around the system attend the new schools with innovations, you put pressure on other schools to enact the same sorts of reforms. You create a catalyst for change." Magnet schools, programs that draw students from beyond traditional attendance zones with innovative curricula or teaching strategies, can serve the same function within school systems—to the extent that they are permitted to diverge from traditional school system practices. Many magnets, however, are permitted to select their students and receive additional funding. Such schools are less likely to serve as catalysts for change because non-magnet schools perceive them to have a competitive advantage. There are over 4,000 magnet schools in public education today, up from about one thousand in the early 1980's.

# IV. Individual Incentives

It's also possible to encourage higher levels of learning by rewarding principals, teachers, and students individually. Rewards based on school-wide performance encourage educators to work together. But ultimately teaching and learning are individual activities and thus incentives for individuals make sense. They need not be introduced at the expense of school-wide incentives, however. The two can be mutually reinforcing.

#### Linking Teacher/ Principal Pay to Performance

inking educators' pay and the prospect of **L**prestige to their individual performance is a powerful way to encourage them to do their best work. Competition for salaries and status has long been the primary engine of achievement in the private sector. But while there have been many experiments in performance-based pay in public education in recent decades, most have failed, largely because the methods used to evaluate teachers' performance haven't been rigorous or fair. Teachers frequently argued, and often rightly, that financial rewards were doled out on the basis of cursory classroom visits by principals, that the process was fraught with subjectivism and often favoritism. Many of the states and school systems experimenting with performance-based reward schemes, as a result, have returned to the so-called single-salary schedule, under which teachers are paid strictly on the basis of their college credentials and their years of service-a reward system that gives teachers scant incentive to do their best work. There is a wide range of ability among teachers, as there is in any occupation, and reward systems should reflect that reality.

Career Ladders. One past performance-based pay experiment, however, is a model for policymakers today. In the mid-1980s the Charlotte-Mecklenburg school system in North Carolina created a four-step "career ladder" that gave outstanding teachers recognition and higher salaries. The district's experience suggests that the tricky evaluation problem is solvable and that tying pay to performance does indeed encourage instructional excellence.

To climb to the top rung of the Charlotte-Mecklenburg ladder, new teachers had to endure more than 50 classroom evaluations over six years by teams of principals and teachers from other schools specially trained by the school system. The evaluators were empowered at several points along the way to recommend teachers' dismissal, and career ladder candidates were afforded several avenues of appeal. Those who reached the top of the ladder received salary hikes of up to \$4,000 per year and the opportunity to mentor new teachers and to serve as evaluators.

Teachers in the career-ladder system generally believed that it was fair and that it identified truly talented teachers for several reasons: the school system established clear standards for promotion up the ladder; evaluations involved educators with different roles in the school system; and multiple classroom visits were conducted over a long period of time.

Nor did the career ladder create a lot of friction between teachers pursuing higher status. There were no caps on the number of teachers that could apply for higher status through the ladder, and thus no capable candidates were arbitrarily left out. Teachers competed against an external standard rather than against each other.

But the Charlotte-Mecklenburg career ladder was abandoned after four years because of both pressure from the state's major teacher union and because the salary bonuses for teachers at the top rungs of the ladder proved costly. But teachers reported that the program did focus their attention on the quality of their teaching. They saw the career ladder as a signal from the school system that their work was important and they responded in kind. Teaching became a subject of serious conversation among Charlotte Mecklenburg's teachers. Unfortunately, that is not the case in many public school systems today. In addition, teacher absenteeism declined during the four-year career ladder experiment in Charlotte-Mecklenburg.

National Teacher Incentives. Just about the time the Charlotte-Mecklenburg experiment ended, school reformers began developing a system for rewarding outstanding teaching using national rather than local standards. They established the National Board for Professional Teaching Standards, an organization that recognizes teachers who have passed its rigorous evaluation system in the same way that various medical boards award advanced licenses to doctors.

espite the fact that only stronger teachers tend **U**to apply for national board certification (there's a \$2,000 application fee), under half the participants successfully complete the year-long process which includes evaluations by 16 separate education experts and a day-long test of subject matter and teaching techniques. The program's rigor, in turn, has made its Good Housekeepinglike seal of approval a valued credential within the teaching profession. "It gives you a measure of prestige that the teaching profession has lacked," says Mary Roberts, an art teacher at Wayne Community High School in Allerton, Iowa, who received national board certification in 1996. The NBPTS has awarded its credentials to nearly 4,800 teachers since it began evaluating teachers in 1993-94 and it expects to have licensed over 100,000 teachers by 2006.

In an attempt to attract and retain top teaching talent, more than a dozen states have begun rewarding nationally certified teachers with pay raises. Since 1997, for example, Iowa has pledged \$50,000 bonuses (paid out over either five or ten years) to teachers who receive national board certification. And while conventional wisdom suggests that teaching doesn't attract people eager for wealth, the bonuses have proven to be a powerful incentive to the state's teachers. Thirty-two Iowa teachers sought board certification in the first three years of the program (only 14 received it). But 270 applied in the two years after the state added the \$50,000 bonus, says Judy Jeffrey of the Iowa Department of Education.

Iowa, however, has fallen into a trap that other states would do well to avoid. Because of fiscal belt-tightening, the legislature this year cut the bonus for NBPTS teachers by 50 percent, a move that has taken the shine off NBPTS certification among the state's teachers. "Unfortunately, the legislature has taken away much of the incentive," says Roberts, who now mentors other teachers in her district.

Measuring teachers' influence on student achievement. As rigorous as it is, NBPTS's evaluation system measures how well teachers teach rather than how much their students learn. Since student achievement is the bottom line in schooling, linking teachers' appraisals to their students' performance would create a powerful incentive for teachers to do their best work. But because so many factors go into student achievement, accurately measuring a teacher's individual influence has been difficult. As a result, very few evaluation systems have sought to do so for fear of being unfair to teachers.

But Tennessee's new system of measuring yearto-year shifts in student achievement over several years enables the state to measure more fairly teachers' influence on student learning in their classrooms. "It casts teacher performance in stark relief," says William Sanders of the University of Tennessee, the author of the state's so-called Value Added Assessment System. Tennessee principals use the results of the system in identifying low-performing teachers for additional training.

Under pressure from the state's teacher organizations, officials have resisted publicizing the results or using them in teacher dismissal actions. Sanders argues, however, that releasing individual teacher performance data to the public would "create chaos" in schools as a result of parents clamoring to get top-scoring teachers. Besides, he says, the publicizing of each school's performance puts ample pressure on principals to deal with low-performing teachers.

Some school systems, however, have offered individual teachers financial incentives based on their students' performance. This fall, for example, teachers in Denver, Colorado, approved an experiment that pays them \$1,000 bonuses for higher student achievement. Such departures from the traditional single salary schedule, the granting of greater authority to schools in the staffing of their classrooms, and other steps necessary to create greater competition within public education imply significant changes in the nature of teacher collective bargaining.

Motivating principals. Edison Schools, Inc., has established a bonus system for principals that is also tied to student achievement. The company's 67 principals are eligible for annual awards of up to roughly 20 percent of their salaries if their schools hit a series of performance targets involving student achievement, profitability, customer satisfaction, and other measures. "I have a very big incentive to perform," says John Pannell, principal of an Edison-run charter school in Washington, DC.

#### Incentives for Students

Ultimately, schools can't be successful unless their students are motivated to learn. Raising student achievement requires the commitment of kids in classrooms. It makes sense, as a result, to explore ways of encouraging students to do their best work. They shouldn't be left out of the competition equation.

**Promotion Gates.** Like schools, the individuals in them respond to sanctions as well as rewards. Today, school districts from Boston to Seattle are trying to pressure students to perform by abandoning the traditional strategy of "social promotion," the advancing of students from grade to grade largely without regard to their level of learning. But the logic of tying student advancement to achievement isn't quite as simple as it seems. Studies have shown that it's wiser to promote underachievers than to return them to sub-par classrooms. School authorities who have sought to address this reality have had to spend millions of dollars helping struggling students. The Chicago school system, for example, where new promotion standards are in place in grades three, six, eight and nine, spent \$42 million in 1998 on mandatory summer school for students who flunked promotion tests, \$15 million on small "transition" schools for eighth-graders who flunked twice, and \$15 million on an after-school enrichment classes for grade repeaters. Together, Chicago's new promotion gates and its extensive programs for struggling students have helped raise both test scores and attendance in the city's schools.

**Graduation Hurdles.** The prospect of repeating a grade challenges only low-achieving students, however. The same is true of the tests that many states are using as high school graduation

requirements. Typically taken in the ninth grade, the tests measure mostly basic skills. As a result, they don't ratchet up standards significantly.

pequiring students to pass a series of end-of-**1** course exams before they graduate from high school is a different story. In a 1997 study, John Bishop of the Center for Advanced Human Resource Studies at Cornell University compared Canadian provinces that included course-based tests in math and science in their graduation requirements to those that didn't. He found that such tests lead students, as well as their parents and their teachers, to pursue higher standards. Schools in provinces using the tests scheduled more hours of math and science instruction, had better science labs, assigned more math and science homework, and were more likely to use specialist teachers in the subjects. Parents, meanwhile, spoke with their children more often about their math and science courses.

In a study of 10 New York school systems that require every student to take the state's rigorous end-of-course Regents exams, Bishop made another significant discovery: faced with a tough, external standard, schools trained their attention on student achievement. Teachers were relieved of hall duty and other non-instructional tasks. The best teachers were reassigned to classes with less-capable students. And the number of student study halls was reduced.

**Employer Pressure.** Another way to apply new pressure on students is through employers. Fifty percent of high school graduates go directly into the workplace, yet employers have traditionally paid scant attention to applicants' high school transcripts. A certificate of graduation has been good enough.

That has sent a strong signal to students (and their guidance counselors) that the rigor of their coursework doesn't really matter. The result,

Bishop writes, is that "the bulk of students...quite rationally avoid rigorous courses and demanding teachers."

Making high school performance an important part of hiring decisions can create very different incentives. Public Agenda discovered through a 1999 survey that 84 percent of high school students would work harder in school if employers used transcripts in hiring decisions in the same way that selective colleges use them in admissions. There's anecdotal evidence to suggest as much. In one instance, several employers in Kingsport, Tennessee, including Eastman Chemical Co., one of the world largest plastics manufacturers, pledged in the early 1990's to give hiring priority to students taking advanced courses at Dobyns-Bennett Junior-Senior High School. Since then, the number of students taking Algebra I prior to the ninth grade has doubled, to 50 percent.

The key to the program's success is that students know that what's on their transcripts matters. To help establish such incentives nationwide, the National Alliance of Business, in partnership with other business and education organizations, has in the past three years persuaded 10,000 employers to pledge to demand high school transcripts of job applicants entering the workplace from high school. The initiative, known as Making Academics Count, includes a national public service advertising campaign to inform students of the importance of their high school transcripts.

**Merit Scholarships.** There is also a role for higher education in motivating students. Georgia encourages students to work hard in high school by paying the cost of tuition, fees, and books at state colleges and universities for those with a cumulative high school grade average of B or better. The percentage of Georgia students meeting that standard in the four years between 1995 and 1998 rose from 54.8 percent to 59.5

percent. And a recent study by three researchers at the Andrew Young School of Policy Studies at Georgia State University suggests that the higher grades have not been the result of grade inflation or of students taking less demanding courses.

The report notes, for example, that the percentage of students taking advanced courses such as calculus and physics has risen in Georgia since the introduction of the HOPE scholarships in 1993, as has the percentage of students taking Advanced Placement exams.

While the Georgia State University report suggests that the HOPE scholarships have helped raise standards, the report also suggests that Georgia's schools could do a far better job of preparing their students for college: no less than 77 percent of Georgia's 358,000 HOPE recipients have lost their scholarships by failing to maintain a 3.0 grade average in college.

To protect against the possibility of grade inflation and the often large disparities in standards from school to school and course to course within schools, several other states that have adopted Georgia's merit scholarship model have added an external standard to their scholarship eligibility requirements, usually in the form a standardized test score.

Similarly, the O'Donnell Foundation of Dallas, Texas, has sponsored student-incentive programs that reward students only after they have achieved the relatively rigorous external standards of the Advanced Placement program.

One would hope that schools would convey and students grasp the intrinsic value of reading Shakespeare or speaking French. Unfortunately, that frequently isn't the case. Offering students financial incentives to take rigorous courses is a controversial idea and many educators and policymakers are likely to oppose it. But the evidence from the O'Donnell projects suggests that financial incentives, even modest ones, can help.

The foundation funded a project between 1991–92 and 1994-95 that rewarded students in nine rural and suburban high schools south of Dallas, Texas, for taking Advanced Placement courses and exams. Students received \$100 for each AP test they passed and the foundation covered the cost of taking the exams for low-income students.

The investment paid significant dividends. The number of students passing AP courses in the schools increased from 41 to 521. Several of the schools launched AP programs (the foundation supplied teachers with training and small, \$250 stipends). And, significantly, the AP incentives prompted the high schools to work with middle schools to prepare students earlier to take the rigorous exams. Specifically, high school AP teachers were paired with middle school teachers in their subject areas to work on ways to include AP test topics in the middle school curriculum. Doing so greatly decreased a sharp disparity in AP test-taking between white and non-white students that existed before the O'Donnell incentive program. Made aware of AP courses as early as the seventh grade and prepared for their rigors, nonwhite students have enrolled in AP classes in much higher numbers since the program's inception.

For the past three years, the O'Donnell Foundation has funded AP incentives at nine impoverished urban high schools in Dallas, and the results have been no less impressive. The number of students passing AP exams in English, math, and the sciences already has risen five-fold, to 703.

## V. Conclusion

The public education system must improve continuously in the years ahead. But public schools won't respond to that challenge without incentives and rewards to encourage hard work, innovation, and achievement. Competition and the incentives it provides are essential to raising the quality of education for all students.

Our study of a wide range of incentive systems in public education suggests that competition, carefully crafted, can be a valuable catalyst for reform. Several conditions are necessary for competition to flourish in public schools. Schools must have:

- High academic standards that are continually updated;
- Sufficient autonomy over staffing, budgets, and instruction;
- Leaders with a "no excuses" mindset who are held strictly accountable for the performance of their students; and
- Resources that are sufficient to establish and maintain high standards for all students.

The National Alliance of Business, on behalf of the business community, calls on educators and policymakers at the national, state, and local levels to introduce into public schools the incentives discussed in this report. Specifically, we challenge them to:

- Enact a wide range of measures that give schools, educators, and students the strongest possible incentives to perform at high levels;
- Endorse the right of every child to attend a school with high standards and strong accountability for the performance of every student;

- Give parents the right to select such schools for their children; and
- Provide the resources necessary to ensure that all students have an equal opportunity to achieve high academic standards.

Anumber of the incentives in the report, like the Concept of competition in education itself, may be controversial to some people. To be sure, there are risks associated with creating a more competitive environment in public education risks that we've addressed in this report. But if schools embrace competition on their playing fields, there's no reason why they shouldn't reap the advantages of competition in their classrooms, where schools' most important work takes place.

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National Alliance of Business 1201 New York Avenue, NW, Suite 700 Washington, DC 20005-6143 202-289-2888

E-mail: info@nab.com

Website: http://www.nab.com